

WISCONSIN EPI EXPRESS

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[Wisconsin Department of Health & Family Services](#)

Division of Public Health
Bureau of Communicable Diseases

"Surveillance provides information for action." [World Health Organization](#)

The WISCONSIN EPI EXPRESS provides a regular update on communicable disease issues of importance in our state and is intended primarily for participants in the public health surveillance system. Please let us know if the topics covered are on target or if there are others that we should be addressing. Thank you. Herb Bostrom: bostrhh@dhfs.state.wi.us

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1. TB Blood Test Coming Soon

QuantiFERON®-TB, a one-step blood test for latent tuberculosis infection, received Food and Drug Administration (FDA) approval in November. Cellestis, Ltd., the test's manufacturer, must provide additional study data as well as work with the Centers for Disease Control and Prevention (CDC) to develop recommendations for the test's use.

The test is performed by placing 10 ml of heparinized blood in several chambers along with mycobacterial antigens. If the patient is infected with *Mycobacterium tuberculosis* organisms, the lymphocytes in the blood will recognize these antigens and secrete gamma interferon. Detection and quantification of gamma interferon form the basis of the test. The test result shows whether infection with *Mycobacterium tuberculosis* is likely. Studies indicate the QuantiFERON®-TB test correlates well with the tuberculin skin test (TST), but is better at excluding people with a history of BCG vaccination or *M. avium* infection.

CDC guidelines for using QuantiFERON®-TB may suggest using the TST to confirm a positive QuantiFERON®-TB result. Because the test relies on a functioning immune system, QuantiFERON®-TB should not be used in patients who:

- have a weakened immune system, including those with AIDS or leukemia, certain diabetics and transplant recipients,
- are on drugs that suppress the immune system,
- are under 17 years old or
- are pregnant

Guidelines should be out sometime later this summer in a *Morbidity and Mortality Weekly Report* article.

The Tuberculosis Program will provide additional information about the anticipated use of QuantiFERON®-TB in Wisconsin as it becomes available.

2. Three Recent Foodborne Illness Outbreaks

The following three substantial recent outbreaks of foodborne infections serve as a reminder to be on the alert for enteric illnesses associated with food and waterborne pathogens.

A. Dunn County Sub Shop-Related Outbreak

On May 1, 2002, the Dunn County Health Officer received a call at 2:30 AM from the emergency room of Myrtle Werth Hospital in Menomonie, because of a number of individuals were seen with signs and symptoms of a foodborne illness. Many of these individuals stated they had previously eaten at a local sub shop in Menomonie. A case was defined as an illness in a person who ate at the Menomonie sub shop between April 27 and May 1, 2002 with an onset of illness within five days of the meal and with diarrhea and/or vomiting and at least one of the following symptoms: nausea, abdominal cramping, chills, or muscle aches. The most frequently reported signs and symptoms among the case-patients included: vomiting, diarrhea, nausea and abdominal cramping, chills, sweats, muscle aches, headache. The illness incubation period ranged from 11.5 to 102.5 hours (median = 30.0 hours). There were 28 males and 27 females. The ages ranged from 4 to 64 (median = 22.5 years).

Later on the same day (May 1) the sub shop was closed due to continued illness of persons who had eaten there. After interviewing the manager of the restaurant it was discovered that four food workers had been ill and working in the sub shop at to the initial stages of this outbreak. Following an extensive clean-up of the facility, that included: complete cleaning and sanitization of all surfaces; complete disassembly and sanitization of all equipment; complete disposal of all food and paper products; and employment of new employees who were not ill; the sub shop was reopened on May 4. Following the re-opening, no additional illnesses were reported.

Testing of stool specimens at Myrtle Werth Hospital and Wisconsin State Laboratory of Hygiene were negative for enteric bacterial and viral etiologic agents. The stools were sent to the Centers for Disease Control and Prevention (CDC) in Atlanta. CDC reported back they identified an uncommon and unusual strain of the "Norwalk-like viruses" by a molecular analysis that is not performed at the WSLH at this time. The WSLH is currently working with CDC to obtain the necessary primers to identify these unusual strains.

This outbreak was unique and different from most other viral outbreaks reported in Wisconsin. In this outbreak 12 (22%) of the case-patients were hospitalized and four case-patients were reported to have had bloody diarrhea.

B. Franklin Health Department Italian Restaurant Outbreak

On Monday May 20, 2002, Franklin Health Department staff received numerous telephone calls and several office visits from citizens complaining of a diarrheal illness following a meal at a local Italian restaurant. Several local health care providers also contacted the Health Department about *Salmonella* infections in patients of theirs, following a meal eaten at the same restaurant. This outbreak identified 44 cases, 27 of which were laboratory-confirmed *Salmonella* Enteritidis infections, as well as eight food workers with laboratory-confirmed infections. The median age of the cases was 31 years. The cases were residents of five counties (Milwaukee, Ozaukee, Racine, Walworth, and Waukesha). One person was hospitalized.

The most frequently reported signs and symptoms among the Restaurant patrons included diarrhea, abdominal cramping, nausea, fever, chills, head aches, body aches, fatigue, muscle aches, vomiting and bloody diarrhea. However, only four of the eight culture positive food workers reported symptoms, which was unusual in this instance, since 100% of the customer case-patients experienced diarrheal illness. The increase in the number of cases among patrons of the restaurant during the second week of the outbreak, as demonstrated on the epidemic curve, suggests that the possibility of employee-induced illnesses was a strong, if unconfirmed possibility.

In the case/control analysis, there was a statistical association between persons who became ill and consumption of meals with chicken (odds ratio = 18.7; 95% confidence interval = 2.7-168.6; p-value = 0.0002). Chicken samples collected and cultured for *Salmonella* from the same lot numbers as the chicken served during the outbreak were culture negative for *Salmonella*. However, none of the chicken served during the outbreak was available for testing. There were two anecdotal situations in which family members who did not go to the restaurant, became infected with *Salmonella* Enteritidis after consuming leftover chicken parmigiana brought home by family members.

The environmental investigation detected conditions and food practices which could contribute to bacterial growth and cross-contamination. During the inspection at the restaurant, the regional sanitarian noted several violations, which may have contributed to cross-contamination to or by chicken within the kitchen area. The restaurant voluntarily closed on June 2, 2002

C. Marinette County Banquet Gravy-Related Outbreak

On Monday, April 8, 2002 the Marinette County Health Department was notified of a possible cluster of illness associated with banquet at a local supper club two days earlier, on April 6. Approximately 350 persons attended the banquet. A confirmed case was defined as an individual who attended the banquet at the

supper club on April 6, experienced diarrhea and at least one other clinical symptom (vomiting, nausea, abdominal cramps, fever, muscle aches or fever) and had a positive stool test for *Clostridium perfringens* toxin. A probable case was defined as an individual who attended the banquet at the supper club on April 6, and experienced diarrhea and at least one other clinical symptom (vomiting, nausea, abdominal cramps, fever, muscle aches or fever) within 24 hours after eating at the banquet. Predominant symptoms of the illness among 33 case-defined patients, included diarrhea, abdominal cramps and fatigue.

According to the sanitarian's inspection report, gravy for the banquet was precooked the night before the banquet and placed in a large plastic pail to cool. This action apparently did not allow the gravy to properly cool and likely resulted in the production of *C. perfringens* toxin. To correlate with this finding, data from the interviews of attendees indicated that the gravy was lukewarm at the table, and appeared to be "bubbling" in the serving carafes on the table, consistent with the gas-production properties of *C. perfringens*.

C. perfringens enterotoxin was detected in the stool specimens submitted to the WSLH and from the tenderloin tips and gravy submitted to the Wisconsin Department of Agriculture, Trade & Consumer

3. Live. and Let Live. Community Education Guide Available

The community education guide supporting the *Live. And let live.* media campaign is now available. The *Live. And let live.* campaign, launched by the Wisconsin Division of Health on National HIV Testing Day 2001, addresses the high rate of HIV infection in communities of color by destigmatizing HIV testing in African American and Latino communities and promoting testing for persons at risk. The purpose of the community education guide is to provide basic HIV/AIDS information, with an emphasis on testing, to communities of color. The primary audience is community leaders in African American and Latino communities, although it can be used by local health departments, HIV program grantees, and other interested parties. The guide is intended to assist community leaders in providing key information to local groups. The guide is in the form of a 3-ring binder guide containing background information, resource listings, fact sheets, and *Live. And let live.* campaign materials. To request a copy of the guide, contact the Wisconsin AIDS/HIV Program at 608-267-5287, request a copy via e-mail at searlick@dhfs.state.wi.us, or download an order form for the *Live. And let live.* campaign materials on the AIDS/HIV Program website at <http://www.dhfs.state.wi.us/aids-hiv>

4. Mark Your Calendars for the Wisconsin AIDS/HIV Program Fall Conference

The Wisconsin AIDS/HIV Program, in cooperation with the Department of Public Instruction and the University of Wisconsin Medical School, is finalizing plans for a statewide fall conference October 14 & 15, 2002 at the Monona Terrace Convention Center in Madison. This two-day statewide conference includes several plenary and multiple information and skill-building sessions for persons working in HIV prevention, surveillance, infection control, care and treatment. Nationally recognized speakers and local leaders and service providers will address topics such as the international aspects of the HIV epidemic, HIV counseling and testing, hepatitis C, youth and HIV prevention,

psychosocial and medical aspects of HIV infection, and targeted HIV prevention for persons at high risk. This is unique opportunity for networking with peers and keeping current with state-of-the-art knowledge on the prevention and control of the HIV epidemic. The conference brochure will be mailed in July. For further information, contact Cathy Means at 608-263-6637; e-mail cjmeans@facstaff.wisc.edu.

5. Wisconsin Hospital Bioterrorism Preparedness Advisory Committee (WHBPAC) Meets

The first meeting of the Wisconsin's Hospitals Bioterrorism Preparedness Advisory Committee was held on Tuesday, June 4, 2002 at the Wisconsin Medical Society, Madison.

Key actions on the part of the Committee were the approval of the Hospital Preparedness Needs Assessment, which will be available to all hospitals on June 24. The Committee also supported the involvement of all hospitals, the county and city Public Health Officers and the county Emergency Management Director and EMS in the Roundtable Discussions, which are scheduled for July and August. The addition of an Infection Control Practitioner to the Committee was recommended.

6. Regional Bioterrorism Planning Teams

All hospitals, local Public Health Officers, county Emergency Management Directors and EMS will be invited to one of seven Roundtable Table Discussions to be held in July and August. The purpose of these discussions will be to receive an orientation to the basic elements of the regional emergency management plan and then for each hospital to select the region that they feel best fits them for regional planning purposes. Some hospitals may decide that it is important for them to participate in more than one region, since their patient flow patterns and/or hospital relationships cross various regions. Or, hospitals may choose also to participate in their border state region for the same reasons.

Hospitals will then be asked to meet with their partners, Public Health, EMS and Emergency Management and others, to begin the planning process. The Hospital Bioterrorism Preparedness Program will provide a template of a bioterrorism preparedness plan, which flows from the objectives of the Health Resources and Services Administration (HRSA) and the Centers for Disease Control (CDC) grants. The regions will then adapt these objectives to the unique environment of their region.

The end result will be a regional bioterrorism preparedness plan that is compatible with the plans of individual hospital, their county plan other regional plans and with the plans of their border states. The proposed goal for the completion of this regional planning process is December 31, 2003.

It is important to note that these regional bioterrorism preparedness plans will not only prepare hospitals and their partners to deal with a bioterrorist event, but also with any infectious disease outbreak and other public health threats and emergencies, which may involve large numbers of patients.

For further information, you may contact Dennis Tomczyk, Director, Hospital Bioterrorism Preparedness, Wisconsin Division of Public Health at 608-266-3128 or e-mail at tomczdj@dhfs.state.wi.us

7. OSHA Bloodborne Pathogen Fact Sheets

The federal Occupational Safety and Health Administration (OSHA) has compiled a series of bloodborne fact sheets that can be viewed and download via the OSHA website. The bloodborne fact sheets include the following topics/titles:

- An Overview of the OSHA Bloodborne Pathogens Standard
- Protect Yourself When Handling Sharps
- Personal Protective Equipment Cuts Risk
- Reporting Exposure Incidents
- Hepatitis B Vaccination – Protection for You
- Holding the Line on Contamination

To view these materials, visit the OSHA website at http://www.osha.gov/OshDoc/data_BloodborneFacts/index.html.

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